AMENDMENTS TO THE CLAIMS

This following listing of claims replaces all previous versions of the claims in this application.

Listing of Claims

1. **(Currently amended)** An isolated polynucleotide comprising:

a) a first nucleic acid sequence encoding a CD8 α-chain ~~operably linked to nucleic acid encoding a transmembrane~~ polypeptide comprising a CD8 α-chain extracellular domain; ~~and~~

b) a second nucleic acid sequence encoding ~~comprising~~ a therapeutic molecule ~~gene~~ of interest; and

c) ~~at least a first~~ transcription control elements and translational control elements for directing expression of said first and said second nucleic acid sequences.

2. **(Currently amended)** The polynucleotide according to claim 1, wherein said ~~nucleic acid encoding a~~ CD8 polypeptide comprises all or a functional portion of a human CD8 α-chain. ~~has greater than 80% sequence identity to the nucleic acid encoding the human CD8 α-chain as set forth in Figure 1 (SEQ ID NO:2).~~

3. **(Canceled)**

4. **(Currently amended)** The polynucleotide according to claim 1 or 2 ~~3~~, wherein said CD8 polypeptide consists essentially of an extracellular domain of said CD8 α-chain and a transmembrane domain. ~~nucleic acid encoding a CD8 α-chain comprises the mouse, rat, or porcine CD8 α-chain as set forth in Figure 1 (SEQ ID NOS: 8, 10, 12, 14, 20 and 24).~~

5. **(Currently amended)** The polynucleotide according to claim 4 ~~claim 1~~, wherein said transmembrane domain is a CD8 α-chain transmembrane domain. ~~CD8 α-chain comprises the sequence selected from the group consisting of the sequences set forth in Figure 1 (SEQ ID NOS:1-26).~~

6. **(Currently amended)** The polynucleotide according to claim 3 or ~~4~~ ~~1~~, wherein said transmembrane domain is a synthetic transmembrane domain. ~~CD8 α chain lacks the intracellular domain of wild type CD8 α chain.~~

7. **(Currently amended)** The polynucleotide according to claim 1, wherein said therapeutic molecule ~~gene~~ of interest is selected from the group consisting of hemoglobin-β, GATA-binding protein, d-aminoevulinate synthase, glucose-6-phosphate-dehydrogenase, Coagulation Factor VIII, Coagulation Factor XI, cystic fibrosis transmembrane conductance regulator, ornithine carbamoyl transferase, α-L-iduronidase, iduronate-2-sulfatase, β-lucosidase, α-galactosidase, galactosylceramidase, acid α-glucosidase, hexamidase A, phenylalanine hydroxylase, collagen type IV, $\alpha 5$, Bloom Sundrome Gene Product, and low density lipoprotein receptor.

8. **(Currently amended)** An expression vector comprising the polynucleotide according to any one of claims 1 to 7.

9. **(Currently amended)** The expression vector according to claim 8, wherein said vector is selected from the group consisting of a recombinant adenovirus, a recombinant retrovirus, a recombinant adeno-associated virus, and a recombinant ~~recombonant~~ herpes virus.

10. **(Currently amended)** The expression vector according to claim 9, wherein said vector is replication defective.

11. **(Currently amended)** An expression vector ~~composition comprising the polynucleotide~~ according to claim 8 for expression in a target cell, wherein said expression of said CD8 polypeptide by said target cell inhibits an immune response against vector-associated antigens. ~~any one of claims 1, 2, 3, 4, 5, 6 or 7, further comprising liposomes.~~

12. **(Withdrawn and currently amended)** A method for inhibiting ~~reducing~~ an immune response against vector-associated antigens expressed by a target cell ~~derived from a gene therapy delivery system~~ comprising ~~:a)~~ contacting said target ~~a~~ cell with said vector ~~gene~~

~~therapy delivery system~~, wherein said vector ~~gene therapy delivery system~~ comprises the polynucleotide according to claim 1, whereby said first and second nucleic acids sequences are expressed, whereby said ~~the~~ expressed CD8 α-chain is associated with the cell membrane of said target cell, and whereby a host immune response against said target cell is diminished as compared to the immune response against a target cell without the CD8 α-chain encoding nucleic acid sequence.

13. **(Canceled)**

14. **(Withdrawn and currently amended)** The method according to claim 12 ~~13~~ wherein said ~~viral expression~~ vector is a viral expression vector selected from the group consisting of ~~[[of]]~~ a recombinant adenovirus, a recombinant retrovirus, a recombinant adeno-associated virus, and a recombinant herpes virus.

15. **(Withdrawn and currently amended)** The method according to claim 12 wherein said therapeutic molecule ~~gene~~ of interest is selected from the group consisting of hemoglobin-β, GATA-binding protein, d-aminoevulinate synthase, glucose-6-phosphate-dehydrogenase, Coagulation Factor VIII, Coagulation Factor XI, cystic fibrosis transmembrane conductance regulator, ornithine carbamoyl transferase, α-L-iduronidase, iduronate-2-sulfatase, -glucosidase, α-galactosidase, galactosylceramidase, acid β-glucosidase, hexamidase A, phenylalanine hydroxylase, collagen type IV, α5, Bloom Sundrome Gene Product, and low density lipoprotein receptor.

16-17. **(Canceled)**

18. (New) An expression vector according to claim 8 for expression in a target cell, wherein said expression of said CD8 polypeptide inhibits an immune response against said expression vector.

19. (New) An improved viral expression vector having reduced immunogenicity comprising a non-viral nucleic acid consisting essentially of a nucleic acid encoding a CD8

polypeptide comprising a CD8 α-chain extracellular domain and a nucleic acid encoding for a therapeutic molecule of interest.